

National Marine Fisheries Service, Alaska Region

Cumulative Effects Assessment (CEA) Workshop for Marine Fisheries Management Analyses

Juneau, Alaska
March 4-5, 2002

Instructors: Dr. Larry Canter and Dr. Sam Atkinson,
Environmental Impact Training
Horseshoe Bay, TX

Attendees: 24 staff from the NMFS Alaska Region, Alaska Fisheries Science Center, General Council Alaska, North Pacific Fishery Management Council, Alaska Department of Fish and Game, State of Alaska Office of the Attorney General, and select representatives from private consulting firms currently under contract to NMFS participated in the workshop. Names at end.

Text: Bass, Ronald E., Albert I. Herson, and Kenneth M. Bogdan. 2001. The NEPA Book: A step-by-step guide on how to comply with the National Environmental Policy Act (NEPA). Note the Appendices of this textbook contains copies of the Forty Most Asked Questions Concerning Council on Environmental Quality's (CEQ's) NEPA Regulations (at page 249) and the CEQ Guidance Regarding Cumulative Effects (at page 295).

Workshop Notebook containing

Tab 1 - Environmental Protection Agency (EPA) Consideration of Cumulative Impacts

Tab 2 - Canter's Chapter 5 CEA Guidance

Tab 3 - Groundfish Draft Programmatic 4.13, Cumulative Effects

Tab 4 - Steller Sea Lion Protection Measures SEIS section 4.13 Cumulative Effects

Tab 5 - EA for TAC Specification for the Year 2002

Workshop Notes:

1. Cumulative effects, or cumulative impacts, is currently the hottest NEPA topic. Larry is currently working with the Corps of Engineers on the cumulative impacts for Ohio River management.
2. NEPA CE history
 - 1971 - Cumulative effects (CE) first mentioned in the Council on Environmental Quality (CEQ) guidance - no one paid attention
 - 1979 - CEQ regs included a definition, Bass p 236-7
 - also see 1508.25a2, Bass p 239 and
 - 1508.25c, Bass p 239
 - 1980s - CE coming up in more court cases
 - 1990s - CE started getting more attention as sustainable development concept becomes more prominent
 - 1990s - literature on CE began to mushroom - CEQ started a CE report, which came out in 1997
 - Bass, p 295 - outlines the 11 steps (p 303) from the CEQ report - there are appendices to the report available on CEQ website
 - Interest in CE has grown and grown since 1997 - there are now courses on CE

- 1999 - EPA review document came out - by Jim Serfis and Mark Sutherland - can see influence of 1997 CEQ report in their guidance - guidance is for their staff, indicating how to evaluate adequacy of EISs they review
 - US and Canada are two lead countries in CE - Canada has done great guide (Cumulative Effects Assessment - Practitioners Guide) - Canada Environmental Assessment Agency website - most is applicable to US NEPA
3. miscellaneous points
- CE can include natural events as well as human actions
 - Some people lump indirect effects with cumulative effects, but that is not correct
 - Endangered Species Act (ESA) defines cumulative effects differently than CEQ - ESA doesn't include future actions of the agency itself, on the theory that those actions will have their own CE analysis - this confuses things, because CE that is adequate under ESA is not adequate under NEPA - can have a finding of no effect under ESA, but significant effect under NEPA
 - Can include future actions like changes in the Clean Water Act or changes being driven by current regulatory requirements
4. tab 2, p5-3 CE definitions address process, but they don't say what the agency should do if they determine that there is a significant CE
5. p 5-4 Principles of CEA
- aggregate
total - both direct and indirect
resource - ecosystem - social environment - must include all 3 - see p 5-9
6. reasonably foreseeable future actions (RFFA)
- Larry had a student review 40 court cases - results on p 5-14
8 steps one should go through to determine RFFA
can solicit input on RFFA during scoping - ask people/agencies what they think should be included
need to be proactive at identifying RFFA - try to scope out at the appropriate scale - helps in scoping if you tell other agencies why you want info from them, and how you'll use it in the CEA
7. review of EPA guidance document (tab 1)
- strengths
 - gives NEPA examples
 - just laying out the systematic approach is helpful
 - question/answer format
 - criteria from NEPA
 - baseline well stated, p 14 "benchmark" - reminds us that CE is not an academic exercise
 - provides general idea of how to approach
 - might be able to monitor thresholds
 - weaknesses
 - no marine examples
 - too project oriented, not regulatory oriented
 - doesn't tell what staffer should do - no action statement
 - very limited socioeconomic discussion
 - EPA staffer may have lacked expertise in some areas to do what the guidance instructs
 - not clear on how to determine significance threshold
 - added topics we'd like to see
 - more detail
 - more examples with fish orientation

- more socioeconomics
 - Could we use this document to plan a CEA?
 - Yes - would help by following their systematic approach
 - Could use to structure outline or format of document so it's easy for them to see that agency has covered the correct topics
8. problems/constraints with doing CEA
- few good precedents
 - time/budget constraints
 - one needs a new mind set - different from the rest of the EA/EIS
 - fisheries issues are very complex
9. 3rd tab: case study from groundfish programmatic draft SEIS
- table 4.13-8 Tier 1 matrix
 - can use this to go through whole CE summary and see the process
 - Appendix J of EIS is the entire CE analysis, and it is about 150-200 pages long
10. need CEQ "state of practice" perspective on baseline -- Larry's bottom line is that current environment is not the baseline for the cumulative effects analysis for a proposed action, despite a decision in a recent Federal Energy Regulatory Commission (FERC) case [Ellen's note: not sure if this was referring to American Rivers vs. FERC or not; in that case, the court ruled that the existing condition river with dam could be used as the baseline for evaluating impacts, and that the no action alternative could be defined as the existing project with no change in management (see Bass, p455); if this is the case the questioner referred to, it is directed at no action and evaluating alternatives, but not specifically addressing the correct baseline for cumulative effects]
11. Baseline: can use different baseline for different resources - could include a table to show what the baseline is for Each resource - Bass p 99-100 and p 109
12. Review of Groundfish Programmatic EIS CEA
- strengths
 - follows 8 CEQ principles
 - follows 11 CEQ steps
 - includes natural events
 - weaknesses
 - missing some details (too much left to appendix)
 - not clearest communication - needs more bullets, pictures, time line, etc.
 - rationale not always consistent
 - Issues and Concern Statements
 - Need to expand analysis, include Canadian actions, etc
 - Include historical management changes
 - Use baseline other than existing condition
 - Add subsistence
 - Add more socioeconomic measures related to salmon, crab, etc
 - Add more on fishing industry
 - Note long term downward biomass trend
 - Summaries obscure site- or species-specific information
13. As part of this workshop we came up with a series of questions concerning CE, wrote them on flip charts and throughout the workshop worked on answers to our questions. These questions and answers are summarized separately.

14. Review of Improvements in Steller Sea Lion CE (4th tab)
 - Table 4.13-1 is laid out better and more understandable than the draft programmatic cumulative impacts section, although still room for improvement
 - Larry would still like to see more information on the relative influence of various effects (e.g., is agency action a small part or a large part of CE?)
 - Robin Senner of URS notes they had thought about that also - maybe could use text instead of symbols - or refer to text where effect and relative importance is described
 - Larry continues to press for more information in the table
 - Long discussion about clarifying whether significance or conditional significance is result of past actions or the proposed/other future actions
 - Overall, Larry says big improvement over groundfish programmatic Steller sea lion CE section is 185 pages
 - Overall strengths
 - Very systematic
 - Tracts CEQ guidelines
 - Connected to ratings for direct and indirect effects
 - Overall weaknesses
 - No summary - really need one to call out the significant CE and track them to mitigation and monitoring plans
15. Review of 2002 TAC-setting EA (5th tab)
 - P 62 - CE references Steller sea lion and another earlier EIS CE (1998 Total Allowable Catch (TAC) Setting EIS), but staff know that if they went to the referenced documents, they would be hard pressed to find clear CE information that they could relate to this EA
 - P 62, bottom, discusses significance in terms of context and intensity
 - Item 5.7 ostensibly summarizes CE, but it doesn't indicate what they are
 - Consensus is that CE is wholly inadequate, even for an EA - referencing is too skimpily - need to summarize essence of what one is citing from the referenced documents
16. Other EA vs EIS elements
 - To have enough information to even mention CE in an EA without doing an entire analysis, would help to have a "rolling CE" document that one could reference - could start with the current Steller sea lion CE section, and keep updating it - if don't have a document to incorporate by reference, make s it much harder to have decent CE section in an EA
 - In Forest Service Shenandoah court case, court found that an EA to be brief and therefore needn't have all the CE detail expected in an EIS
 - Main thing about CE in an EA is to say what you're doing
17. Indicators
 - Pat Livingston talked about work with indicators that they are using at the Alaska Fisheries Science Center - this work is very much cited in NMFS NEPA work
 - They want to consolidate data such as stock trends vs other trends to try to figure out interactions
 - The indicators they've been tracking are showing up in lots of their NEPA documents, because these data are well organized
 - Research center hopes that what comes out of NEPA documents will help inform ecosystem management decision about setting targets, etc. - also need agreed-upon triggers for adaptive management actions - e.g., if there is a 20% decline in x, then do y
 - See tab 5, table 4.8-1 - this is good table of indicators - cites lots of trends - this does not have a cause/effect link yet, but some of the research center people are discussing it - might start with a general rockfish model
 - Robin Senner (URS) and Tamra Faris agree that the indicator information provides an amazing

perspective for the reader on the relative importance of human activity vs natural activity - shows that natural environmental changes overpower effects of human actions in this context - this provides very valuable perspective

Must be careful in defining indicators and changes in activity

Can look to Habitat Sensitivity Index similarly

Could develop conceptual model with a set of experts working through the potential indicators and how they relate to various species

Pat Livingston has someone who will work 1/2 time on this for next two years

Robin Senner suggested prioritizing indicators so that limited resources could be focused on improving the most important indicator information

Steve suggested maybe other NMFS groups could provide support - all agree Pat's work is keystone to most NEPA documents and evaluating sustainability

18. Larry asked what guidance people would like to see come out of this session? What type of guidance would be most useful?

Make improvement to the 11 steps in the CEQ handbook - create a step-by-step process that analyst can follow and be sure they are compliant - rearrange the 11 steps in logical order and perhaps add a couple more steps

Provide instruction on EA vs. EIS level of detail

Clearly articulate what the CEA is supposed to communicate to the Council or the public - help analyst focus on goal of this document and the decision to be made - what does the decision-maker need to know?

Re helping identify appropriate RFFA to consider, the following suggestions were made:

Provide checklist or template of RFFAs to consider

Assign one person somewhere to maintain the master list of RFFA

Assign someone to maintain a rolling RFFA document that includes not only a list of the RFFA, but has the analysis as well, which other EAs and EISs could cite

Provide guidance on how to include CE in scoping letter

Make examples similar to those in the EPA guidance (tab 1) that show how to address various CEA (for example, see Bass p 312)

c Make recommendations for preparing a summary of CE - suggest page length for EA vs EIS CE sections - note the importance of summary and elements of summary, such as areas of controversy, key conclusions, what still needs to be resolved, mitigation, etc.

c Provide written guidance on selecting time envelope of CE - how far back and how far forward should one go

c Note key documentation points, such as:

Spatial/temporal boundaries for analysis and why they were chosen

Significance criteria

Indicators

Baseline, and why it was chose

Provide guidance on significance criteria and identifying thresholds - maybe have another training session on that topic alone - try to achieve some consistency or standardization of criteria - that would help in comparing projects and documents to one another

Supply CE guidance in the context of EA guidance and in the context of Regulatory Impact Review and Regulatory Flexibility Analysis

Provide guidance on how to tier and incorporate by reference and what the difference is (see Bass, p 240)

Reiterate a subset of the CEQ 40 questions as they relate to CE

Provide guidance on what should go in main text and what goes in appendix

Provide guidance on socio-economics and the human community - definitions, significance criteria, etc. - noted should refer to Brainard, *NMFS Guideline to Social and Economic Assessment*

Could make all these guidance documents available as links on the NMFS website
Steve Davis noted that Ramona Schreiber is putting a NMFS spin on the CEQ 40 questions
Someone is trying to create a list of "go to" NEPA people, in response to Hogarth direction
Provide guidance on consistency review - maybe have NEPA expert review for NEPA compliance
- need internal review criteria, so errors get caught early rather than at last minute
Pat Livingston notes they are creating a document library on the intranet
Provide guidance on how you "proportion" the relative contributions of various influences on CEs -
Larry notes no clear answer to this, but maybe just grappling with the question helps indicate major and minor influences

19. Tamra Faris on what NMFS can do right now to provide more guidance:

Keep updating the AKR NEPA web page with new info;

(<http://www.fakr.noaa.gov/sustainablefisheries/ea/default.htm>)

She'll provide a list of good reference documents people can go to;

Identify which of the CEQ 40 questions one should review when doing CE; – See Questions 18 and 24.

Take the questions and answers from this workshop and polish it up as a draft document to accompany the notes;

Prepare a scoping brochure for all fisheries actions – Looking for someone to take this on as a special project.

The rolling document concept is good - we can use Steller sea lion, but there isn't anything for crabs, scallops, etc. - Steller sea lion can be used as a format or template for doing this

She likes the idea of a checklist for reviewing or preparing EAs - expressed concern about filling in a checklist, finding deficiencies, and issuing the EA anyway because of time pressure - that record in the file could be damaging in an appeal - so cautions one be careful about checklists

20. Sequence of actions, reviews and NEPA decisions

Gretchen Harrington notes that the normal sequence is for the Council to consider an action and prepare an EA. Someone at NMFS writes the regulation and adds more to the EA to make sure everything is covered, the regional General Counsel reviews the document for NEPA compliance, and a finding of no significant impact (FONSI) is issued - the document goes to headquarters at that point, and the regulation either is or isn't promulgated and printed in the Federal Register, but regardless, the NEPA document is already over and done with - headquarters can comment on the NEPA document, but it isn't relevant unless they require the document be redone.

Workshop Participants

NEPA Cumulative Impact Assessment Workshop (Juneau Federal Building March 4-5, 2002) Instructors: Larry Canter and Samuel Atkinson

1. NMFS SF - Melanie Brown
2. NMFS PR - Shane Capron
3. NMFS - Steve Davis
4. NPFMC - Jane DiCosimo
5. NMFS HC - Matt Eagleton
6. NMFS - Tamra Faris
7. AK Attorney General - Jon Goltz
8. Foster Wheeler - Ellen Hall
9. NMFS SF - Gretchen Harrington
10. ADF&G - Jeff Hartman
11. NMFS HC - Cindy Hartmann
12. URS Jon Isaacs
13. ADF&G - Earl Krygier
14. NOAA GCAK - John Lepore
15. NMFS OMI -Steve Lewis
16. AFSC REFM - Pat Livingston
17. ADF&G - Kristin Mabry
18. NMFS SF - Bridget Mansfield
19. NMFS SF -Glenn Merrill
20. NMFS SF - Nina Mollett
21. NMFS SF - Tom Pearson
22. NMFS PR - Kim Rivera
23. URS - Robin Senner
24. NMFS SF - Sue Salveson

NMFS: National Marine Fisheries Service

AKR: Alaska Regional Office

HC: Habitat Conservation Division (Juneau or Anchorage)

PR: Protected Resources Division (Juneau or Anchorage)

SF: Sustainable Fisheries Division (Juneau)

OMI: Office Management and Information

AFSC: Alaska Fisheries Science Center

REFM: Resource Ecology and Fisheries Management (Seattle)

GCAK: NOAA General Counsel Alaska

ADF&G: State of Alaska Department of Fish and Game (Juneau or Anchorage)

AK Attorney General: State of Alaska, Office of the Attorney General (Anchorage)

NPFMC: North Pacific Fishery Management Council staff (Anchorage)